

The Hurt study, published in 1981, was a ground-breaking report on the causes and effects of motorcycle accidents. Although more than 25 years old, the study still offers riders insight into the statistics regarding motorcycle accidents and tips on safer riding.

The Hurt Study found that lack of attention to the driving task was a common factor for the motorcyclist in an accident. Motorcycle riders in these accidents showed significant collision avoidance problems. Most riders would overbrake and skid the rear wheel, and underbrake the front wheel greatly reducing collision avoidance deceleration. The ability to countersteer and swerve was essentially absent. The typical motorcycle accident allows the motorcyclist just less than 2 seconds to complete all collision avoidance action. These findings underline the importance of developing proper riding skills and habits. The best way to do this is to periodically take a MSF riding course. The skills you learn may save your life.

The following article summarizes some of the findings of the Hurt study and deals mainly with accidents resulting from collisions with other vehicles. It does not specifically address single vehicle accidents which accounted for approximately one-fourth of the motorcycle accidents studied. Only a small percentage of these single vehicle accidents were due to vehicle failure (less than 3%), while rider error was present as the accident precipitating factor in about two-thirds of the cases.

## How Was Harry Hurt?

*by Robert Vaughan*

Perhaps the most renowned study of motorcycle accident causes and countermeasures was done for the University of Southern California by researcher Harry Hurt. He investigated 900 motorcycle accidents and analyzed another 3,600 motorcycle traffic accident reports. The Motorcycle Safety Courses developed by the Motorcycle Safety Foundation are designed largely to build the skills that the Hurt Study found to be missing in the accident-involved rider. Looking at just a few of the Hurt findings allows us to see the essential things we can do to avoid an accident.

**Who hits us?** Most accidents involve a car violating our right-of-way. Most frequently, the car turns left in front of the motorcycle.

**Where do we get hit?** Intersections are the most likely place for the motorcycle accident, with the car not only violating our right-of-way, but often traffic controls as well. Most accidents are on short trips such as shopping, errands, visiting friends, entertainment or recreation. Most accidents happen close to the trip origin. More than three-fourths of the hazards are within 45° of straight ahead.

**Why do we get hit?** The main reason is that the driver of the other vehicle does not see us in time to avoid the collision. Alcohol is involved in almost half of the fatal accidents. Most motorcyclists are smart enough to separate riding and drinking. Unfortunately, too many car drivers on the road are more mentally challenged.

**Why aren't we seen?** Conspicuity of the motorcycle is the most critical factor. Conspicuity is most critical from the front.

**How can we be seen?** Accident involvement is significantly reduced by the wearing of high visibility yellow, orange or bright red jackets. It looks as though we need to take extra care to make sure that we are seen. This means both the helmet (white or bright colors in the day and reflective material at night) and jacket should be highly visible. It also means positioning our motorcycles where we can be seen in traffic.

**How else can we avoid accidents?** Just paying attention to our driving improves our odds. We should use extra care on any motorcycle on which we have less than five months experience. Motorcycle rider courses reduce accidents and injuries in accidents. The courses teach the braking and swerving skills found to be lacking in many accident-involved riders. In many states, the Riding and Street Skill course also allows us to omit the on-street exam when we obtain our motorcycle license. Proper eye protection prevents the impaired vision which delays hazard detection.

**How can we prevent injuries in an accident?** Heavy boots, jackets, and gloves reduce or prevent road rash. Full coverage helmets increase protection and reduce face injuries.

**Knowledge is power.** Now we know where and why we get hit. We know how to make ourselves seen and how to avoid both accidents and injury. It's up to us to put this knowledge to use.